

# REMOTE SENSING OF ENVIRONMENT

*An Interdisciplinary Journal*

Volume 25, Number 1, June 1988

## *Contents*

ACKNOWLEDGMENT	1
J. R. DYMOND (Palmerston North, New Zealand) Nonparametric Modeling of Radiance in Hill Country	3
H. L. LIU AND A. K. FUNG (Arlington, TX) An Empirical Model for Polarized and Cross-Polarized Scattering from a Vegetation Layer	23
S. M. SINGH AND R. J. SAULL (Reading, England) The Effect of Atmospheric Correction on the Interpretation of Multitemporal AVHRR-Derived Vegetation Index Dynamics	37
J. G. P. W. CLEVERS (Wageningen, The Netherlands) The Derivation of a Simplified Reflectance Model for the Estimation of Leaf Area Index	53
M. BOYER, J. MILLER, M. BELANGER, AND E. HARE (Ontario, Canada) AND JIYOU WU (People's Republic of China) Senescence and Spectral Reflectance in Leaves of Northern Pin Oak ( <i>Quercus palustris</i> Muenchh)	71
A. R. HUETE (Tucson, AZ) AND R. D. JACKSON (Phoenix, AZ) Soil and Atmosphere Influences on the Spectra of Partial Canopies	89
JOHN G. LYON, KEITH W. BEDFORD, AND CHIEH-CHENG J. YEN (Columbus, OH) AND DEBORAH H. LEE (Detroit, MI) AND DAVID J. MARK (Vicksburg, MI) Determination of Suspended Sediment Concentrations from Multiple Day Landsat and AVHRR Data	107
MICHAEL E. HODGSON (Boulder, CO) Reducing the Computational Requirements of the Minimum-Distance Classifier	117

# REMOTE SENSING OF ENVIRONMENT

*An Interdisciplinary Journal*

Volume 25, Number 2, July 1988

## *Contents*

DIANE EVANS (Pasadena, CA) Multisensor Classification of Sedimentary Rocks	129
S. ARANUVACHAPUN AND D. E. WALLING (Exeter, England) Landsat-MSS Radiance as a Measure of Suspended Sediment in the Lower Yellow River (Hwang Ho)	145
H. BRAD MUSICK AND RAMONA E. PELLETIER (NSTL, MS) Response to Soil Moisture of Spectral Indexes Derived from Bidirectional Reflectance in Thematic Mapper Wavebands	167
J. R. IRONS AND K. J. RANSON (Greenbelt, MD) AND C. S. T. DAUGHTRY (Beltsville, MD) Estimating Big Bluestem Albedo from Directional Reflectance Measurements	185
R. P. BUKATA, J. H. JEROME, AND J. E. BRUTON (Ontario, Canada) Particulate Concentrations in Lake St. Clare as Recorded by a Shipborne Multispectral Optical Monitoring System	201
<b>SHORT COMMUNICATION</b>	
PAUL E. LA VIOLETTE AND RONALD J. HOLYER (NSTL/Bay St. Louis, MS) Noise and Temperature Gradients in Multichannel Sea Surface Temperature Imagery of the Ocean	231
ERRATUM	243

# REMOTE SENSING OF ENVIRONMENT

## *An Interdisciplinary Journal*

Volume 25, Number 3, August 1988

### *Contents*

JANE A. ELROD (Greenbelt, MD) CZCS View of an Oceanic Acid Waste Dump	245
NARENDRA S. GOEL AND TOBY GRIER (Binghamton, NY) Estimation of Canopy Parameters for Inhomogeneous Vegetation Canopies from Reflectance Data: III. TRIM: A Model for Radiative Transfer in Heterogeneous Three-Dimensional Canopies	255
A. R. HUETE (Tucson, AZ) A Soil-Adjusted Vegetation Index (SAVI)	295
DOROTHY K. HALL AND ALFRED T. C. CHANG (Greenbelt, MD) AND HONNAPPA SIDDALINGAIAH (Gaithersburg, MD) Reflectances of Glaciers as Calculated Using Landsat-5 Thematic Mapper Data	311
CURTIS E. WOODCOCK (Boston, MA), ALAN H. STRAHLER (New York, NY), AND DAVID L. B. JUPP (Canberra, Australia) The Use of Variograms in Remote Sensing: I. Scene Models and Simulated Images	323
CURTIS E. WOODCOCK (Boston, MA), ALAN H. STRAHLER (New York, NY), AND DAVID L. B. JUPP (Canberra, Australia) The Use of Variograms in Remote Sensing: II. Real Digital Images	349
G. W. PALTRIDGE AND J. BARBER (Melbourne, Victoria) Monitoring Grassland Dryness and Fire Potential in Australia with NOAA/AVHRR Data	381
G. SUITS, W. MALILA, AND T. WELLER (Ann Arbor, MI) Procedures for Using Signals from One Sensor as Substitutes for Signals of Another	395
AUTHOR INDEX TO VOLUME 25	409
SUBJECT INDEX TO VOLUME 25	411
VOLUME CONTENTS	